

.Net Quickstart for Experienced Developers

Duration:	4 days
Type:	advanced

Description

This is a fast paced course for software teams who require an accelerated guide to the .NET Framework and its major API's. The course takes experienced OO developers and rapidly transitions them from their current environment into .NET development.

Experienced JEE and Windows developers can use this course to move to .NET by leveraging their existing skills. Each topic is related to the delegates background and detailed comparisons are made with the JEE and older Microsoft technologies.

Course examples are presented using VB .NET and C# implementations. Delegates can choose a single language to concentrate on during the course or explore mixed language development.

The full course runs over four days and covers all major aspects of .NET application development. Alternatively clients can tailor the course down to three days based on their specific requirements.

Prerequisites

Delegates must be very proficient Java, C++ or VB6 developers with a minimum of 5 years commercial programming experience.

List of Modules

Fundamental Concepts

- Introduction to the CLR
- Comparing the CLR and the Java VM
- Assemblies and Application Domains
- Examining assemblies using ILDASM
- Locating and loading assemblies
- Deploying assemblies to the GAC
- Obfuscating .NET code

Advanced Fundamentals

- Creating secure assemblies
- Understanding Intermediate Language
- Writing programs using IL and ILASM
- Creating code wizards using CodeDOM
- Examining code using Introspection
- Context bound objects and interception

Programming Languages

- Common features of all .NET languages
- Transitioning from VB to VB .NET
- Comparing Java and C# development
- Understanding Managed C++ coding
- Creating unit test classes with NUnit

Threading Support in .NET

- Creating and stopping threads
- Using the CLR thread pool
- Synchronizing shared data
- Using the Monitor class

I/O Support in .NET

- Reading and writing from files
- Networking using sockets

XML Support in .NET

- Creating XML with DOM
- Building XML using Writers
- Consuming XML using Readers
- Querying documents using XPath
- Applying XSLT stylesheets in .NET
- Validating documents against Schemas

Database Access with ADO .NET

- The ADO .NET architecture and XML
- Creating and using database connections
- Executing command objects
- Understanding DataSet objects
- Manually populating a DataSet
- Populating a DataSet from a query
- Generating and using Typed DataSets

Client Side Development with Windows Forms

- The basics of a WinForms application
- Creating forms manually and in the IDE
- Working with controls and menus
- Displaying the result of database queries
- Event handling using delegates
- Safely adding concurrency to WinForms
- Building your own custom controls

Web Application Development with ASP .NET

- The ASP .NET compilation model
- Creating new Web Applications
- Using Code Behind to separate presentation from business logic
- State management and controls
- Using the HTML and Web Controls
- Validating input and logging errors
- Displaying the result of database queries
- Building custom controls for ASP

Web Services in .NET

- Building Web Services with ASP .NET
- Creating Web Service clients
- Adding state to Web Services
- Securing Web Service method calls